

CLAIMS

What is claimed is:

1. A message display device comprising:

5 a potentiometric control unit, said potentiometric control unit is electrically connected to an air blower via controlled connecting circuit, said potentiometric control unit is of a compact size allowing for placement within an engine compartment of a vehicle;

a power source, said power source being electrically connected to and powering said potentiometric control unit;

10 an air hose, said air hose extends from said air blower;

a visual display lifting apparatus, said visual display lifting apparatus is connected to said air blower by said air hose, wherein said visual display lifting apparatus is in air communication with said air blower; and

15 a visual display, said visual display is removably attached to said visual display lifting apparatus via a fastening means.

2. The message display device of Claim 1, wherein said power source is a 12-volt battery.

3. The message display device of Claim 1, wherein said air blower has a handle to facilitate portability, and wherein said air blower includes an air vent located along a rear side of said air blower.

5 4. The message display device of Claim 1, wherein said potentiometric control unit is connected electrically to said power source via a power cord, wherein said power cord has battery terminal connecting clamps to facilitate attachment to said power source.

10 5. The message display device of Claim 1, wherein said potentiometric control unit comprises:

an electronic cycle timing device, said electronic cycle timing device is connected electrically between said power source via power cord and said air blower via a controlled connecting circuit;

15 an ON/OFF switch, said ON/OFF switch electrically controls said electronic cycle timing device via a controlled circuit cord;

a first adjustable potentiometer, said first adjustable potentiometer is electrically connected to said electronic cycle timing device via a first connecting wire, said first adjustable potentiometer is provided with an adjustable knob and

pointer, wherein said first adjustable potentiometer is adapted to operate in communication with said electronic cycle timing device to allow for manually selected, active current flow for operative engagement over a selectively prescribed time interval; and

5           a second adjustable potentiometer, said second adjustable potentiometer is electrically connected to said electronic cycle timing device via a second connecting wire, said second adjustable potentiometer is provided with an adjustable knob and pointer, wherein said second adjustable potentiometer is adapted to operate in communication with said electronic cycle timing device to  
10       control air bag deflation duration.

6.       The message display device of Claim 1, wherein said visual display lifting apparatus defines a plurality of inflatable air bags, wherein said plurality of inflatable air bags includes an upper air bag, a medial air bag, and a lower air bag, wherein  
15       each of said plurality of inflatable air bags is generally triangular-shaped in cross-section and has a lower surface and an upper surface joined by a convoluted circumferential sidewall, wherein said convoluted circumferential sidewall of each of said plurality of inflatable air bags forms recesses, said plurality of inflatable air bags is fabricated of a textile material defining a non-skid surface having small

protuberances randomly dispersed, wherein said protuberances facilitate adhesive engagement to an upper surface and a lower surface, wherein an upper surface of said lower air bag is attached in an air-tight manner to a lower surface of said medial air bag, and an upper surface of said medial air bag is attached in an air-tight manner to a lower surface of said upper air bag, wherein said upper surface of said lower air bag and said lower surface of said medial air bag and said lower surface of said upper air bag define one or more air-flow portals to facilitate air communication between said plurality of inflatable air bags.

7. The message display device of Claim 1, wherein said fastening means includes integral strap-support loops being positioned along a left front corner and a right front corner of said upper air bag and along a left front corner and a right front corner of said lower air bag

8. The message display device of Claim 1, wherein said visual display defines a generally square-shaped sheet of collapsible material having an upper edge opposing a lower edge, said visual display is provided with a plurality of linear creases being horizontally aligned at spaced locations there down, said upper edge and said lower edge of said visual display are formed into an elongated loop

which provides a passage through which a straightener member is slidably inserted, said straightener member is of a length measuring greater than a length of said elongated loop, thus upon insertion of said straightener member through said elongated loop, opposed ends of said straightener member protrude beyond ends of said elongated loop, wherein said opposed ends of said straightener member are looped with a fastening strap and wherein said fastening strap is inserted within said strap-support loops, whereupon each said fastening strap is subsequently tied, thereby facilitating attachment of said visual display to said visual display lifting apparatus.

9. The message display device of Claim 5, wherein said first adjustable potentiometer is set to a desired setting, whereupon current passes from said electronic cycle timing device to said air blower, wherein said air blower is actuated to supply pressurized air to said lower air bag through an air inlet port of said lower air bag, thus inflating said lower air bag, whereupon said medial air bag and said upper air bag are inflated over said prescribed time interval, thus applying a simultaneous upward force against an upper surface and a downward force against a lower surface, thereby causing an opening of said upper surface and facilitating elongated extension of said visual display in a taut manner, whereupon completion

of said prescribed time interval as set by said first adjustable potentiometer, said plurality of inflatable air bags deflate, discharging air from said plurality of inflatable air bags through said air hose to said air blower from which air escapes via said air vent of said air blower for a time period as prescribed by said second adjustable potentiometer, and said plurality of linear creases of said visual display mate with said recesses of said plurality of inflatable air bags, thereby facilitating collapse of said plurality of air bags and said visual display in an accordion manner to a compact shape.

10. The message display device of Claim 5, wherein said potentiometric control unit is supplied with a cigarette lighter adapter to facilitate alternate electrical connection to said power source.

11. The message display device of Claim 6, wherein said textile material is vinyl.

12. The message display device of Claim 9, wherein said upper surface is a fabric layer adhered to a bottom surface of a vehicle hood, and wherein said lower surface is an automobile engine compartment.

13. The message display device of Claim 1, wherein said visual display lifting apparatus is of an inflatable configuration, said visual display lifting apparatus defines a forward sidewall having a plurality of fastener elements attached to said forward sidewall, wherein said fastener elements are adapted to mate with  
5 corresponding fastener elements attached to a rear side of a selected message display sheet, thus said visual display lifting apparatus allows for a myriad of interchangeable messages to be easily and quickly displayed, changed and removably attached thereto upon desire.

10 14. The message display device of Claim 13, wherein said fastener elements are hook-and-loop fasteners.

15. A message display device comprising:

a potentiometric control unit, said potentiometric control unit is electrically  
15 connected to an air blower via controlled connecting circuit, said potentiometric control unit is of a compact size allowing for placement within an engine compartment of a vehicle;

a power source, said power source being electrically connected to and powering said potentiometric control unit;

an air hose, said air hose extends from said air blower;

a visual display lifting apparatus, said visual display lifting apparatus is connected to said air blower by said air hose, wherein said visual display lifting apparatus is in air communication with said air blower;

5           a retractable visual display, said retractable visual display comprises a generally rectangular housing, said housing includes an elongated slot located along a top side of and adjacent to a forward side wall of said housing so as to permit a flexible banner to pass through said elongated slot, said forward side wall is opposed by a rear side wall, wherein said housing includes a spring-biased  
10       mandrel, around which said flexible banner is wound and affixed at a lower end of said spring-biased mandrel, said spring-biased mandrel has an anterior end opposite a posterior end, and wherein said flexible banner is removably attached to said visual display lifting apparatus; and

15           a lifting apparatus support base, said lifting apparatus support base is of an elongated configuration, wherein said retractable visual display is mounted atop a front portion of said lifting apparatus support base, wherein a remaining portion of said lifting apparatus support base provides a surface for accommodating said visual display lifting apparatus.



16. The message display device of Claim 15, wherein said retractable visual display further comprises:

a header plate, said header plate has an integral cylindrical boss projecting outwardly therefrom so as to provide bearing support to said spring-biased mandrel, said header plate is mounted flush to an outer end of said housing against  
5 said forward side wall, said top side, and said rear side wall of said housing;

a torque-spring anchoring cap, said torque-spring anchoring cap is mounted against an inner wall of said header plate, a torque-spring anchoring cap is provided, said torque-spring anchoring cap has an internal elongated notch for  
10 anchoring a first end of a torque spring;

a cap ring, said cap ring is mounted flush against said torque-spring anchoring cap and said cap ring has a smaller diameter than said torque-spring anchoring cap, said cap ring defines a spring-arm passage extending downward therethrough and being aligned with said internal elongated notch of said torque-spring anchoring cap, said spring-arm passage provides a channel through which  
15 an arm of said torque spring passes and extends from said arm at said arm's first end to said internal elongated notch of said torque-spring anchoring cap;

a mandrel-abutment ring, said mandrel-abutment ring is formed integral to said spring-biased mandrel and extends radially around said spring-biased

mandrel, wherein said mandrel-abutment ring functions to limit lateral movement of said spring-biased mandrel toward said header plate, said mandrel-abutment ring has a face which abuts against an outer face of said cap ring upon lateral movement of said spring-biased mandrel in a direction toward said cap ring, thus  
5 arresting further movement of said spring-biased mandrel, said spring-biased mandrel rotatably resides within a mandrel-receiving chamber located inside said housing, wherein said mandrel-receiving chamber is formed as a cylindrical cavity which extends through said cap ring, through said torque-spring anchoring cap, and through said header plate, wherein said anterior end of said spring-biased mandrel  
10 protrudes outside said header plate, said spring-biased mandrel is adapted to provide return torsional force via said torque spring being coiled around said spring-biased mandrel and down a length of said spring-biased mandrel, and wherein said torque spring is attached to said spring-biased mandrel at said anterior end and posterior end of said spring-biased mandrel, wherein said  
15 posterior end of said spring-biased mandrel is provided with an elongated slit extending axially through said spring-biased mandrel which allows anchored engagement by an elbow of said torque spring, thus securing said torque spring to said spring-biased mandrel;

an end cap plate, said end cap plate is mounted to said housing against

said forward side wall, said top side, and said rear side wall of said housing,  
wherein said end cap plate is positioned opposed to said header plate;

a bearing cap, said bearing cap is mounted against an inner wall of said end  
cap plate;

5 a core end cap, said core end cap is mounted flush against and has a  
smaller diameter than said bearing cap;

a linearly elongated bore, said linearly elongated bore extends through said  
end cap plate, through said bearing cap, and through said core end cap, said  
linearly elongated bore provides a bearing surface for a bearing pin;

10 an elongated slot, said elongated slot extends axially through said anterior  
end of said spring-biased mandrel, said elongated slot is adapted to receive a flat  
working end of a standard flat-blade screwdriver, thereby facilitating manual  
torquing of said spring-biased mandrel; and

15 a threaded thru-hole, said threaded thru-hole is formed within both said  
cylindrical boss of said header plate and said spring-biased mandrel, thereby  
facilitating locking of a desired torque of said spring-biased mandrel, wherein said  
header plate and said spring-biased mandrel are manually aligned and threadedly  
receive a threaded industrial pin.

17. The message display device of Claim 15, wherein said flexible banner has an upper edge formed into an elongated loop, said elongated loop encases a straightener member, wherein said straightener member is of a length measuring greater than a length of said elongated slot of said housing, thereby preventing retraction of said straightener member into said housing, said straightener member has ends inserted through integral strap-support loops of said visual display lifting apparatus, thereby facilitating removable attachment of said flexible banner to said visual display lifting apparatus.